

45. $\Sigma \tau = ?$ $\Sigma \vec{\tau} = \vec{\tau}_1 + \vec{\tau}_2$

$$\tau = \vec{r} \times \vec{F}$$

$$\tau_1 = (1.3\text{m})(4.2\text{N}) \sin 75^\circ$$

$$\tau_1 = 5.27\text{Nm (out)}$$

$$\tau_2 = (2.15\text{m})(4.9\text{N}) \sin 60^\circ$$

$$\tau_2 = 9.12\text{Nm (in)}$$

$$\Sigma \tau = 3.85\text{Nm (in)}$$